

**Minutes of the Carlisle Board of Health  
November 18, 2008**

Present: Board Members Jeff Brem (Chairman), Chris Deignan, Michael Holland; Absent –Bill Risso; also present Linda Fantasia (Agent),

The meeting was called to order at 7:30 p.m. at the town hall.

**ADMINISTRATIVE REPORTS (Fantasia)**

**Personnel Board** – The Board approved draft memo requesting an increase in pay and additional hours for Caywood. The request for an increase is a joint request with Planning Board. Representatives from both boards will ask to meet with the Personnel Board in November.

**Agent Evaluation** – Brem is preparing the evaluation. He asked for any additional comments from Board members to be sent to him.

**Generator** – DPW excavated a portion of the trench. The gas and electric lines still need to be laid out.

**Pictometry** – Mark Lamere (Planning Board) has offered to work on Pictometry/GIS issues for the Board of Health and Planning Board. He was able to open DEP/DCR's email, which maps Carlisle's wells. This is now accessible with the Board's GIS software.

**Credit Card payments** – Fantasia is still checking on this item.

**Flu Clinic** – 100+ seniors, 44 teachers, town hall and public safety attended. Teachers and town hall employees paid for the vaccine.

**Policies** – draft for a future meeting.

**FY10 Budget** – COLA is 2.5% with no budget increase (\$77491.00). This is the third year of a zero growth budget. It will leave only \$1338.00 in the non-salary account. (FY09Salaries and Wages = \$74320.00 (operating budget of \$3171.00); FY10Salaries and Wages = \$76153.00 (operating budget of \$1338.00)

**Police Station Site Clean Up** – ENSR did a five-year evaluation under the current Risk Assessment. The site is not ready to be closed out because it does not meet the GW-1 standard. Benzene is still above 5 ug/l in a monitoring well. The recommendation is to continue with natural degradation and review in five years.

**Shelter Drill** – Fantasia attended a recent Red Cross Shelter course along with MRC Chair Mary deAlderete. They also participated in Concord's recent shelter drill. The drill was used to test Carlisle's MRC call down list. Of 37 emails sent out; 10 responded; 4 attended drill; 3 would have attended if it were a real event and 3 selected standby. Based on this response, BOH/MRC need to emphasize "Just in Time Training". The Red Cross is available to do an assessment of the Corey Building as a shelter. Fantasia noted that it is important to obtain agreements (formal or informal) with local vendors in order to support a shelter. She suggested the Board might want to do a shelter exercise once the generator is installed. The Board has a self-help guide, which can be used to plan, prepare, activate and evaluate an emergency event. Brem said this should be a 2009 Goal.

**CORI Training** – Fantasia attended the recertification class, which is a new requirement.

**Minutes** – It was moved (Deignan), seconded (Holland) and unanimously voted to approve the minutes of 10/2/08, as revised. 3-0-1 (Cahill was absent).

**58 WOLF ROCK ROAD** – failed septic system. Present for the discussion was Kent Gonzalez, owner, and Don Martinage and John Martinage of Martinage Engineering.

Gonzalez explained that cost estimates on the original design, which is a conventional Title 5 system, ranged from \$83-93,000. The estimates were from licensed contractors who work regularly in Carlisle. Gonzales asked the Board for ideas on how to reduce the cost. Martinage said it was a difficult site. The percolation rate was 59 mpi with 40" to groundwater. The terrain slopes requiring a large amount of fill for breakout grading. The design is in full compliance with state and local regulations. Wetlands are not an issue. Martinage presented a plan showing the difference between a Title 5 system and one designed under local regulations. The size of the leaching area would be reduced from 2277 s.f. to 1384 s.f.. He asked whether the Board would grant local waivers. He said it would but there would need to be a public hearing. Brem asked

whether they had considered a retaining wall in lieu of breakout grading. Martinage said the barrier would surround most of the system. The Board's consultant does not like surrounding a leaching area with barriers because they can create a bathtub effect.

The Board suggested looking into alternative technologies. Holland suggested a drip dispersal system such as Perc-Rite. This type of system is designed to distribute discharge at a depth of at least 6 inches below finished grade. This would reduce the distance to groundwater by approximately 1.5' and require less fill. The Board asked whether a Presby system was considered. Martinage said they looked at the Presby design but it only allows for one design waiver and they would need two: separation to groundwater and reduced footprint. The Board said that it is possible to do two waivers, but it requires DEP approval. Martinage said he would check with DEP. Holland said a drip system is particularly useful in bad soils. If groundwater and finish grade are the real issues, a 6" offset to finish grade is the best solution. Holland said there is new guidance from DEP on the loading rate for a drip system. He suggested Martinage look into it. Cahill asked whether the system would be affected by cold weather. Holland said the systems are used in wintertime with no problems. Brem said there might be a benefit in moving the system closer to the property line. This might require a swale.

Gonzales and Martinage thanked the Board for the input. They will rework the design and get back to the Board. Gonzales does not expect to install the system until spring.

## **COMMUNITY SEPTIC LOAN PROGRAM PUBLIC DISCUSSION**

Brem gave a brief background and history on the program. He explained that the loan program was established following the adoption of the 1995 Title 5 Code, which required an inspection of the septic system for all property, transfers, with the exception of immediate family transactions. If a system fails an inspection, it must be replaced within two years. To help homeowners with failed systems, the state set up a revolving fund whereby cities and towns could loan money at a very low interest. The program has been in effect for over ten years and most unsewered towns have participated. Originally funded at \$164 M, the fund is administered by DEP and the Water Pollution Abatement Trust. Town Meeting voted to join the program in May. In September, the Board received approval from the state to participate in the program up to an amount of \$200,000. The Board has developed a criteria for reviewing loan applications. Loans will be paid at the rate of 5% interest over a ten year betterment period. The maximum loan amount is \$40,000. The town will receive \$20,000 to start up the program. Additional funds may be requested in future years. Gloucester has received \$5M and Concord has asked for more than \$1M. The criteria established by the Board is: Zone A or non-conforming lots, systems less than 100' from a well and finally date of application. Owners will need to provide three cost estimates for design and construction. The town must approve its first loan in order to receive the \$20,000 grant. The Board reviewed a number of applications from other towns before deciding on how to operate the program in Carlisle.

Dave Reed (Page Brook Road) asked why the Board had changed from 2% to 5% interest. Brem said this followed a meeting with Larry Barton, Finance Director. Barton explained that 2% interest, even if repaid in ten years, might not cover the interest cost of a twenty year bond. He recommended a 5% rate, especially if the town is looking to make the fund self-sustaining. The Board voted at its last meeting to change the rate to 5%. Reed said there is little benefit to homeowner under this new formula. It is possible to get an equity loan for 3.8%. Brem said that the town's program does not require income verification on ability to repay, although there is a \$150,000 cap per household.

Allen Merry (Westford Street) said he just installed a system at a cost of \$63,000. He asked whether participating in this program precluded using the \$6,000 state tax credit. The board said he would have to check with his accountant.

Ed LeClair (Baldwin Road) was concerned about the \$150,000 cap. Brem explained this was a state condition. The program was originally intended to help low income households. LeClair asked about the fee. Fantasia said the Board had discussed a \$75 fee, but it had not yet been voted. Brem said the Board would address this later in the meeting.

Reed said the Board should not be looking to make money on the program. Brem said the goal is to benefit the environment and the Carlisle community by helping homeowners replace failed systems in cases where cost is a factor. Reed asked if the Board could change the rate. Brem said the only choices are 2% or 5%. The Board has decided on 5%, based on discussions with the Finance Director, and does not plan to change it at this time.

## **MOSQUITO CONTROL PROGRAM PUBLIC DISCUSSION**

Brem provided an overview of how the state's mosquito control program was established, how it is regulated and why the Board decided to bring the issue before the town. In Carlisle two birds tested positive for WNV last August. West Nile Virus (WNV) and EEE, which are mosquito borne illnesses, are identified health risks. The Board is considering the East Middlesex Mosquito Control Project (EMMCP). This program provides a menu of services. At a previous meeting, David Henley, Superintendent of EMMCP provided a proposal for the Board. Approximately 500 acres of wetlands would be treated with helicopter application of Bti to reduce the larval stage mosquitoes. There is no recommendation to do adulticide spraying. The cost of the program with the helicopter treatment is \$26,733. This includes a \$5219 facilities and administration charge. The Board has asked the Selectmen for a warrant article for the winter town meeting. The annual town meeting in May would be too late to treat early spring mosquitoes although monitoring and surveillance work could still be done. Brem noted that there are no known impacts to humans from Bti. Carlisle is the only community in the area without a program. Mosquito magnets are not effective according to Henley. Brem explained the possibility of voluntary contributions to fund the program. He emphasized that the Board's intent is to deal with mosquitoes for public health reasons, not nuisances. It is not up to the Board to join a program. The decision must come from residents through a town meeting vote.

Dave Reed asked how long the town would need to continue the program. Brem said mosquito population would be monitored. There are varieties of different mosquitoes with different behavioral patterns. The program could be adjusted accordingly. EMMCP is looking for more than a one year participation. The town would always have a representative on the Board.

Alex Parker (Russell Street) asked whether there was evidence that a mosquito control program actually reduces the incidences of WNV and EEE. Brem was unsure about specific data other than the fact that the more mosquitoes there are, the more likely the diseases.

Judy Asarkoff (River Road) said she found scientific papers that disagree that mosquitoes equate with WNV. She reviewed data showing more dead birds even when mosquito populations were down. This is conflicting information that needs to be considered.

Alex Parker asked how dead birds were tested. The Board explained that Carlisle had participated in a program organized by the state. The program has closed for the year.

Leslie Thomas (Estabrook Road) said she had spoken with a professional birder. Crows can travel 25-30 miles, which detracts from using dead birds to identify a local problem. She suggested that if a presentation is made at town meeting, it should be done by an unbiased spokesperson, not someone from EMMCP, which has a stake in selling the program. The Board agreed that this was a good suggestion.

Avril Taylor (North Road) seconded the idea of an independent presentation. She also asked how many deaths in Massachusetts resulted from these illnesses. Cahill said that it is not just fatalities that concern the Board, but any health impacts. Taylor said she understood that the affects of Bti last for more than five years when applied to wetlands. Brem said that Henley addressed some of these long term affects when he met with the Board. No other animals were injured.

Parker agreed that Bti is harmless to humans. It is a bacteria that only affects the mosquito larva.

Leslie Thomas (Estabrook Road) pointed out that the larva is a food source for other species. There will be an affect. She also noted that her property is entirely organic and has been for three years. She asked whether the program would affect that standing. The Board was not certain of the answer. Parker suggested checking with other towns. Cahill noted that Lincoln, which is in a program, has its organic farm.

Peter Mastromarino (East Riding Dr) said that owners do not have the option of treating their own wetlands. He believes that WNV is severely underreported. Brem said the town has the option of doing just surveillance. Holland said the town could do this on its own without joining a program.

Tricia Smith (Indian Hill) said the town should ask the state if it has data from Carlisle. The Board agreed to check on this.

Kathleen Hauser (Daniels Lane ) asked how to encourage the Selectmen to sponsor the program. The Board suggested calling individual Selectmen and voicing support at town meeting.

Asarkoff said the Board needs to consider how the Bti is applied. She is opposed to using genetically modified corn granules. She suggested using ice crystals as the application medium. The Board agreed to check with Henley about this.

Holland said there is still the question of impact to bees. Carlisle has a number of bee keepers. Ed Earney (North Road) noted that only wetlands greater than three acres would be treated. This is not the entire town. It might be possible to relocate hives. Brem noted that the program is not allowed currently in the National Wildlife Refuge.

Taylor asked for advice on what owners can do about mosquitoes if the town does not join a program. Brem said the Board should prepare guidelines as a 2009 Goal. He said the Board would also look into whether the Cranberry Bog could be excluded.

Earney said he has been a bee keeper for ten years. Bees can travel 1-3 miles from their hives. He does a totally organic product. He said there are some inconsistencies in the evidence that there is no impact to bees from larviciding. Entire colonies have been known to collapse as a result of systemic disorders caused by outside agents. Earney suggested that the Board needs to look into this more.

Brem said it may be possible to exclude certain areas or occupations such as bee keeping. These are all important issues that the Board wants to hear about. The Board is not recommending any type of spraying which might be more dangerous for bees. Carlisle is not a good set up for spraying due to limited road access.

Asarkoff does not want her chickens to be eating Bti laced corn granules. Brem said that EMMCP uses GIS mapping which is very precise to determine application zones.

Mitchell Weiss (Brook St) did not have a problem with larviciding 5-600 acres under a controlled plan approved by the Board of Health and Conservation Commission. How owners treat their own properties could be more problematic.

Reed said there are other ways to reduce mosquitoes. As chairperson of Old Home Day, they apply garlic to the fields just prior to the event. Brem said he is meeting with Conservation in December for their comments.

Weiss said the Board needs to prioritize health over environment. He questioned whether it is better to laden children with DEET compared to a controlled mosquito program. Although there may not have been any deaths in the state from WNV, as the number of mosquitoes and incidences of disease increase, this may become more of a probability.

Asarkoff said that individual health is also a component. Healthier individuals will have more resistance to long term affects.

Mastromarino asked whether the town could opt out of the program at anytime. Brem said EMMCP is looking for an initial capital investment from each member. The program cannot run well unless members make a commitment. He is looking into a voluntary tax contribution to help fund the program.

Smith said that the money would be better spent on Lyme Disease, which has a higher incidence in town. In her research she did not see any correlation between mosquito control programs and disease incidence of WNV. She advocates personal responsibility. This is how she manages her goat herd operation. She is concerned that residents are actually looking to treat mosquito nuisance and that there is minimal disease risk involved. She would target any money to more significant health needs of the community. She would like to see more data on how a mosquito control program has been shown to reduce health risks. Brem agreed that Lyme Disease is on the increase, but there is little that can be done about it at the present time.

Thomas said that she came down with Lyme even though she was careful. It is a hazard of living in a rural space like Carlisle.

Holland is concerned that there have been no documented cases of WNV or EEE in town or nearby, whereas many residents are suffering from Lyme Disease.

Asarkoff said she had heard that WNV may actually be a combination of illnesses triggered by individual immune systems. The Board might do better educating the public on prevention.

Parker questioned whether 500 acres would make a difference. Brem said that it will be targeted wetlands. There are a number of different types of mosquitoes. It should be possible to determine whether there is a reduction in the mosquito that carries WNV.

Joan Parker (Russell Street) said that not everyone can control his or her health condition. The elderly or immune compromised do not have a choice. You cannot always build in resistance.

Tatiana White (Abderdeen Drive) was interested in how mosquitoes would be targeted. Brem explained the different species. The Culex mosquito is most responsible for WNV but others can carry the disease. Deignan said that even though there have been no cases of EEE in Carlisle, it would be tragic if one occurred.

The Board thanked the audience for their comments. The Board is interested in representing both sides fairly so the town can make an informed decision. The Board has not taken an official position and is waiting for a full board attendance before voting.

## **GENERAL BUSINESS**

**PLANNING BOARD MEETING** – Brem attended the Planning Board meeting to discuss Jon Witten's recommendations on controlling development prepared by consultant Jon Witten. The Board had previously agreed to send a memo, but Brem was able to attend and discuss the matter. The Board does not feel it has the power to regulate development. Its jurisdiction is public health. The Board is authorized to enforce Title 5. If a design meets this criteria, the Board must issue a permit. It is only in cases where an applicant requests a waiver that the Board has some discretion. Brem noted that the Board recently revised its local regulations to address some of the issues brought up by the consultant. Brem said the Planning Board may not have agreed with the Board's position, but eventually understood the Board's limitations. The Planning Board asked whether the Board of Health would consider approaching DEP to support some of the recommended regulations. Brem said that he did not think this was feasible. It is important to separate public health from zoning.

**BILLS** – It was moved (Holland) and seconded (Deignan) to approve the bills as presented. Motion passed 4-0-0.

**Application Fee:** It was moved (Deignan) and seconded (Holland) to set the application fee for the community septic loan program at \$75.00 Motion passed 4-0-0.

There was no further business. Meeting voted to adjourn at 10:00 pm.

Respectfully submitted,

Linda Fantasia  
Recorder